

CLAIMS

- 1 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, characterized by the reduction of volumetric expansion in steel slag, verified on laboratory by specific tests, seeking its economical reuse in pavement base and sub-base, and asphaltic covering in road works;
- 2 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by inertization yard, over which the steel slag will be laid and processed;
- 3 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by distribution of the steel slag over the inertization yard in a homogenous way;
- 4 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by movement of the slag on the inertization yard using a leveling machine, a plough, a bulldozer or any other equipment capable of promoting the aeration of this material through its mixture, accelerating of the carbonation of the free magnesium and calcium oxides existing in the slag;
- 5 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by initial representative sample analysis of the lot for verification of the volumetric expansion level of the steel slag (initial volumetric expansion);
- 6 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by hydration, through water aspersion over the slag with a water truck, or aspersers installed on the inertization yard, arranged in a way so that all the slag is reached, accelerating the hydration reactions of the oxides contained the slag, especially the free magnesium and calcium oxides, which are the main responsible for the volumetric expansion of the steel slag.
- 7 - ECONOMIC REUSE OF THE STEEL SLAG THROUGH INERTIZATION (AERATION AND HYDRATATION) PROCESS, according to claim 1, characterized by leaching and solubilisation of the steel slag, generating residues that will have other treatment.